In 2020, political turmoil and unrest in many countries will likely generate near-constant disruption. International trade agreements are in flux. Supranational organizations are challenged. Nationalism is on the rise. Yet, overarching all these troubles are powerful economic and demographic forces, which will have a larger influence than political headlines on the health and performance of most real estate markets.

Financial stress will become more evident in 2020, especially in epicenters of political discontent like Hong Kong and the United Kingdom. Yet, we do not see a systemic financial crisis looming. Instead, we see the powerful secular forces of demographics, technology, urbanization, and environmental factors working together to shape metropolitan economies and drive tenant demand. Capital market trends will also play a major part in real estate's performance over the next three years. These include the rise of "alternatives" in portfolios, the search for durable yields to meet future obligations, and lower point-forward returns across all asset classes.

For 2020–22, LaSalle foresees a slowing global economy, ongoing trade disagreements, high asset valuations, and disruptive technology as headwinds to favorable real estate performance. However, many of these same forces are also linked to salutary tailwinds. Slow growth is linked to low interest rates, which elevates values. High valuations are linked to momentum in capital markets, when investors increase allocations to real estate as a result of strong prior performance. Technology disruption is linked to innovation hubs, which create value for real estate just as they do for entrepreneurs and other investors.

Investors will need to steer through many headwinds and tailwinds over the next three years. After nearly a decade when tailwinds predominated, replicating past performance will be a harder goal to achieve. At this mature phase of the cycle, we caution investors to remember the lessons of past cycles when considering how this cycle might be different. One of the best ways to do this will be to adopt the ideas described by Daniel Kahneman in *Thinking*, *Fast and Slow*—distinguish between instinctive biases and deliberate, fact-based evidence when assessing the risks and opportunities in 2020–22.

CHAPTER 1

The Global Outlook for 2020



The Global Outlook for 2020

The beginning of a new decade¹ is a fitting time to reflect on where we have been and to anticipate where we might be going. In nearly all developed countries, a full and steady recovery from the Global Financial Crisis (GFC) has been accomplished. Low inflation and accommodative monetary policies have created the lowest interest rate environment ever seen. Real estate investment performance has been strong, and a gradual expansion of "core" markets and property types has taken place.

In 2020, investors should look for opportunities in a wider variety of specialized property types and take advantage of a broad range of financial structures, including senior and mezzanine loans, and indirect strategies to access highly-focused operating expertise. Allocations to real estate continue to grow from deep sources of capital: pension funds, insurance companies, sovereign wealth funds, foundations, endowments, target date funds, family offices, financial advisors, and self-managed retirement funds.

In sum, there have been more tailwinds than headwinds for investors since the GFC. Slow, steady economic growth, low inflation, and falling interest rates create ideal conditions for real estate to thrive. This positive environment is unlikely to vanish quickly in 2020, but its contribution to future positive performance will lessen. Even if the potential for a sharp global reversal is highly unlikely, fund managers will need to pay close attention to the macro forces driving each country and each specific metro market in their portfolios.

Headwinds, Tailwinds, and Secular Trends

The next few years will likely bring more headwinds into LaSalle's outlook. Looking back over the past 50 years of real estate investing, a mix of headwinds and tailwinds has been the norm within each of the prior four decades, so the past ten years have been unusual. The sustainability of recent benign economic conditions is but one of several macroeconomic issues facing real estate investors in 2020 and beyond. What are the others? Here is our list of the headwinds and tailwinds that investors should consider in 2020–22.

- 1 A new decade does not technically begin until 2021, but economic history will likely treat the year 2020 as part of the "2020s," just as 1990 is considered part of the "1990s."
- 2 Technology can act as a headwind when it speeds up obsolescence, especially for retail properties.
- 3 Technology can also act as a tailwind in markets where human capital creates high value-add activities, and by making fixed assets like real estate more efficient through proptech innovations.
- 4 Rising transparency across ESG (environmental, social, and governance) factors, market data, and proptech-enabled data sources is documented in the JLL 2018 Global Real Estate Transparency Index. The next edition of this report is due out in 2020, which may or may not show further progress in transparency for specialized property types, sustainability factors, and resiliency.
- 5 Long term is defined as a decade or longer; in other words, longer than the typical economic or real estate cycle.

MACRO HEADWINDS

- · Slowing global economic growth
- · Ongoing trade and treaty disagreements
- · Heightened domestic political and policy polarization
- · High asset valuations
- Disruptive technology²

MACRO TAILWINDS

- · Continuing low interest rates
- · Rising allocations to real estate
- · Balanced fundamentals in most markets
- Supply constrained by rising land values and higher construction costs
- Greater adoption of technology across all sectors of society—business, households, healthcare, leisure, and real estate³
- Rising transparency in more countries across more aspects of real estate investing⁴

In 2019, we delved more deeply into our four "meta-macro" trends that are likely to influence real estate over the long term.⁵ We refer to these as DTU+E secular trends because they are based on demographics, technology, urbanization, and environmental conditions. These factors are especially important when looking through and beyond economic or property cycles to the underlying forces that are more powerful over the long term. Secular trends can act as either headwinds or tailwinds for real estate portfolios. The insights from our careful examination of each trend are given in this 2020 edition of the *Investment Strategy Annual* and in white papers posted to LaSalle's



123 N. Wacker Drive, Chicago, IL, USA

website. Here are the secular trends investors should consider in the 2020s, with references to LaSalle's most recent research on each topic.

SECULAR TRENDS FOR REAL ESTATE DRIVE LASALLE'S RESEARCH

- Demographics: Impacts of aging,6 shortages of highly-skilled labor, and migration
- · Technology: The adoption of proptech, changes in how tenants use space, and data analytics that track these changes7
- · Urbanization: The interplay of regulatory controls, supply barriers, demand, density, mixed-use zoning,8 and city resilience
- Environment: Climate risk9 and sustainability efforts

Implications for Investment Strategy

Over the 2020–22 period, all of these macroeconomic forces should shape real estate investment strategy, portfolio construction, and investment performance. However, just identifying these long-term secular trends is not sufficient for building a top-performing real estate portfolio. The implications of each trend are rarely intuitive and must be understood in combination, not in isolation. These trends are also not immune from cyclical factors. Pricing and timing still matter, and taken together, these trends raise complex execution issues.

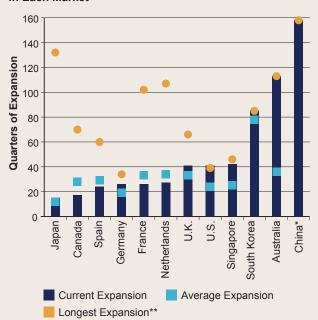
For example, the global economy will be slowing, which means that rent growth, leasing, and other drivers of real estate income are likely to downshift to a lower gear. Yet, slow growth means that interest rates will also remain low and contribute to elevated asset valuations. Meanwhile, the pace of structural or secular change could escalate, as technology acts as both a disruptor and an accelerator to both economic and social trends. These tech shifts are ultimately expressed through fast-changing tenant requirements and landlord decisions in real estate markets.

Macroeconomic themes contribute to portfolio construction and top-down investment strategies, especially for large assemblages of properties. However, micro-locations and specific assets each have their own "resilience" factor to consider. Some assets and strategies amplify the macroeconomic trends and will deliver "high beta." For example, hotels are a high-beta contributor to property portfolios as they rise and fall quickly in response to economic activity. Long-leased properties, like medical office buildings or top-tier grocery-anchored retail, are more insulated from all the noise and are typically "low beta."

High performance "alpha" strategies, by contrast, are achieved by getting the offense-defense mix and timing right, as well as by focusing on stock selection and execution. Some real estate strategies generate nearly all their alpha when they put money to work or withdraw it (e.g., securities, multi-manager mandates, and debt). Other real estate strategies continue to add alpha after the

Major Economies Ranked by the Length of **Their Current Expansion**

Current Expansion vs. Average Expansion in Each Market



A recession is defined as two consecutive quarters of negative growth, with double-dip recessions counted as a single recession.

*Data for China goes to 1980. The country has not had a recession by our definition in that period, so the quarterly length shown is for the full 1980-current period.

**Longest expansion figures are based on data available, which varies by country. All markets have data back to at least 1980, and the majority of markets have data back to 1960.

Source: LaSalle Investment Management analysis of data from Oxford Economics, Organisation for Economic Co-operation and Development (OECD), and Bloomberg.

Includes GDP estimates through 2019:Q3.

"buy" through active management (leasing, cap-ex, and repositioning). In all of these situations, a fast/slow dichotomy arises because real estate is a durable, long-lived asset, subject to fast-changing headwinds and tailwinds that can affect the ride.

Real Estate: A Durable Asset

Real estate bridges the past, present, and future, more so than any other asset class. The useful economic life of the typical building is two to five times longer than other "blue chip" investments. Land can represent 30% or more of the total investment value in some markets and effectively retains its economic value over time. Buildings frequently

- 6 See the LaSalle Macro Indicators Deck, November 2019.
- See the sidebar Proptech and Data Science for Real Estate Investment on page 47
- See The Journal of Portfolio Management, Real Estate Issue, Fall 2019.
- See the sidebar Climate Change: Implications for Investment Strategy on page 14.



4 Hutton Center, Santa Ana, CA, USA

have proven flexible and adaptable over long periods. ¹⁰ The income streams generated by the buildings, operating companies, and REITs in an investor's portfolio are generally more stable and longer-lived than the financial health of the tenants that are the source of that income (see Durability and Duration on page 57). Tenants come and go whenever their financial circumstances or location preferences change. Yet, the enduring reuse value of the real estate remains intact, provided that economic conditions provide sufficient back-up demand for the vacated space. It is this proviso that will weigh heavily on the market when the global economy slows in 2020, or if it stalls further in 2021 or 2022.

Real estate's longevity creates both opportunities and challenges for real estate investors. If high stability is a positive, lower adaptability can be a negative. When local economies move quickly up or down, rent levels eventually reset, depending on the prevailing lease structure in the market or for a particular asset. In an economic slowdown, this lag effect will insulate many portfolios from declining tenant demand or a hesitation to commit during a period of high economic uncertainty. Nevertheless, just as tenants face new business, political or social pressures at a faster speed, real estate needs to adapt more quickly too.

Responsiveness to tenants as well as tenant creditworthiness becomes even more important in a slowing economy, when tenants are likely to be under pressure to cut costs and raise efficiency.

SLOWING ECONOMY, FAST-MOVING TENANTS

Even in a slow-moving economy, tenant needs can change at breakneck speed. In many countries, tenants are demanding more services and amenities, both from building owners and from the neighborhoods where they live and work. They are also demanding more economic flexibility by seeking to shift the risks in their operating environment to the landlord via flex space, coworking, turnover rent, and shorter break options in leases. Building owners and their capital partners must respond by using value-engineering and cost-benefit analysis instead of simply chasing the most recent, expensive fads. At the submarket level, investors should pay closer attention to neighborhood amenities and the surrounding infrastructure. Building owners are sometimes able to improve a neighborhood through the delivery of services like security or routine maintenance of public areas. They also occasionally sponsor or co-sponsor off-site improvements required or enabled by local planning authorities, such as signage, community events like farmers markets, affordable housing, or recreational facilities. The long duration of real estate means that modest outlays to improve a local streetscape or public area can contribute to a longer payback period that has a net positive financial effect on a property.

Fast and Slow Insights

The faster pace of occupier behavior change, as well as the rapid accumulation of tenant data on how users experience buildings in real time, are in sharp contrast to the durable longevity of buildings and the slowing global economy. This fast/slow contrast can be useful for real estate investors who consider human behavior when constructing their investment strategies.

In his landmark book, *Thinking, Fast and Slow*, Nobel laureate Daniel Kahneman distinguishes between System 1 thinking (fast, automatic, instinctive, frequent, and unconscious) and a more deliberate System 2 approach (slow, logical, calculating, and conscious). An understanding of these two approaches to how people process information will be helpful to real estate investors and portfolio managers in the years ahead.

Understanding how a System 1 mindset works is especially useful for an investor employing an opportunistic strategy designed to take advantage of the stresses that build up in late-cycle economies. As an economy slows and banks get more discriminating in how they lend and to whom, highly leveraged sectors are put at risk. The recapitalization of credit-starved assets, discounted properties with deferred maintenance, and property types like shopping centers and automated

¹⁰ According to CoStar, 89% of New York City's large office buildings built before 1940 are still in use today. Similar, or even older longevity estimates can be found in many European cities, whereas Asian cities typically have newer stock.

warehouses that are rapidly experiencing technology shifts are all likely targets for opportunistic investing in 2020-22.

Investors taking an opportunistic or non-core approach must be nimble and reactive. Their strategies should include preparation for market breakdowns, financial distress, and discounted pricing, but they will not be able to precisely predict when and where compelling buying opportunities will arise. One of the insights from Kahneman's work is that System 1 thinking relies on recent experience,11 media coverage,12 and/or deeply rooted biases¹³ in order to move quickly. However, some of these mental habits may not be reliable guides to long-run outcomes. An opportunist can take advantage of these systemic biases that often occur when volatility intensifies and snap decisions must be made by market participants. In terms of property examples, a wholesale discounting of all retail properties is likely to miss the positive micro attributes of specific shopping centers that have excellent long-term fundamentals due to strong trade area demographics, barriers to new supply, or the opportunity to add residential, offices, or other specialized uses. In another example, when loan portfolios start to default, banks tend to make rapid decisions based on regulatory requirements. The speed of resolution can be more important than taking the time to understand the quality of the loan's collateral. In past periods of financial distress, banks sometimes sold higher quality loans first, just to create liquidity and meet regulatory requirements quickly. Similar dynamics occur when there is a "run" on an open-ended fund and investment managers have to meet redemption requests or gate the fund from further redemptions.

System 2 thinking, on the other hand, works better for a careful investor who takes a deliberate approach to investing. This method typically includes peer-group performance benchmarks, longer hold periods, and an emphasis on income stability. The real estate investment management industry calls this a "core" approach to investing. A more accurate description would include risk-return attributes, such as an income-orientation, value stability, or assets well-protected from new competition and capable of maintaining market dominance over a long time horizon. Asset selection is supported by careful micro research, while portfolio construction is guided by longerterm secular themes and benchmark comparisons. A System 2 approach can also take advantage of insights that other investors' biases suggest. For example, a System 1 approach to core investing is prevalent in many

countries. In other words, some investors tend to focus on the newest, tallest buildings in the trendiest neighborhoods with the most expensive amenities in the largest cities. Sometimes these assets represent excellent long-term value, but not always. An investor employing a careful System 2 approach can typically separate the "ego-driven" deals from the "value-oriented" investments.

Over the next three years, the real estate investment markets will reward a deeper understanding of both System 1 and System 2 thinking in the capital markets. Even though major economies will be slowing and the aggregate pace of leasing and growth rates are likely to moderate, the accelerating speed of volatile events may interrupt the smooth functioning of some real estate markets. An example of how quickly markets can shift was provided in the third quarter of 2019 when the We Company (parent of WeWork and WeLive) delayed and ultimately withdrew its plans for an IPO. In the world's largest office markets, WeWork was the fastest growing individual tenant in 2018 and the first half of 2019. Their demand for new space came to an abrupt halt in early October when their valuation plummeted. The media coverage of this situation has been so intense that investors will likely lose perspective, in much the same way that psychology studies show how intuitive judgments on health statistics are shaped by misleading media reports.14 Investors may shy away from all coworking or flexible office tenants based on the decline of WeWork. Yet, the secular trend for open-plan offices and coworking may not be interrupted at all and may thrive even without WeWork as the market leader.

Macro Trends, Micro-Markets, and Stock Selection

Real estate typically follows, rather than leads, local economies. These local economies, in turn, are linked to national and international growth drivers. Slow growth at



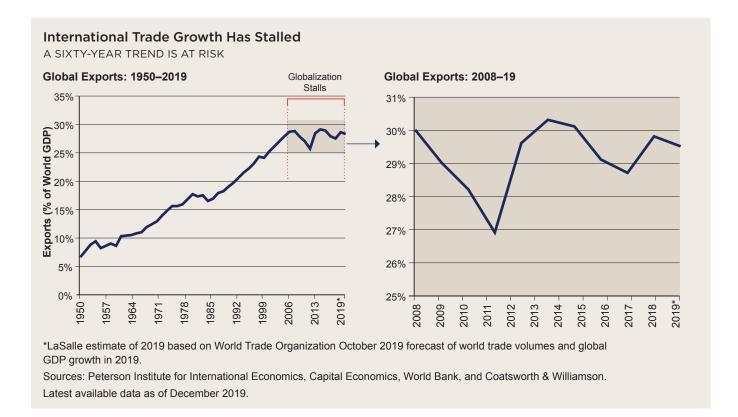
Logiport West Anseong, Seoul, South Korea

¹¹ The recent past creates an anchoring or framing effect that can be misleading.

¹² The availability heuristic refers to wide media coverage that crowds out harder-to-obtain information

¹³ Overconfidence, "expert intuition," and misdirected attention can all create blind spots.

¹⁴ Kahneman, D. Thinking, Fast and Slow, 2011. Availability and Affect, p. 138. Accidental and violent deaths make headlines; death by disease does not. The Slovic-Fischhoff studies show how this distorted the judgement of study participants.



the macroeconomic level can mask much faster demand growth in subsectors and districts that serve the fastestgrowing industries.

Examples of fast-growth sectors that are already well-understood by real estate investors include e-commerce, healthcare, logistics, and web-based services. Other emerging industries that are less well-recognized include cyber security, data centers, fitness/nutrition, gaming, gerontology, life sciences, sustainable energy, and temperature-controlled storage. All of these industries, and the specialized real estate that serves them, have the potential to drive higher real estate performance, even in a slow-growth economy.

By the same logic, slow-growing countries or metros may have pockets of fast-growing industries that cluster in districts that punch above their size in driving tech innovation, real estate demand, and high investment performance. The analysis of micro-markets has come a long way since real estate investors used to rely on "driving the neighborhood" to figure out where high-growth demand drivers were located. New data-gathering technology like amenity-mapping, geo-fencing, and tenant UI/UX¹⁵ sensors provide investors and property managers with more information than ever before. While a strong macroeconomic headwind can exert stiff resistance, a micro-market tailwind can counteract a macro trend. At the asset level, micro data analysis also helps reveal the local amenity networks that innovation districts rely on. A single building in a fast-growing, mixed-use district is not an isolated island.

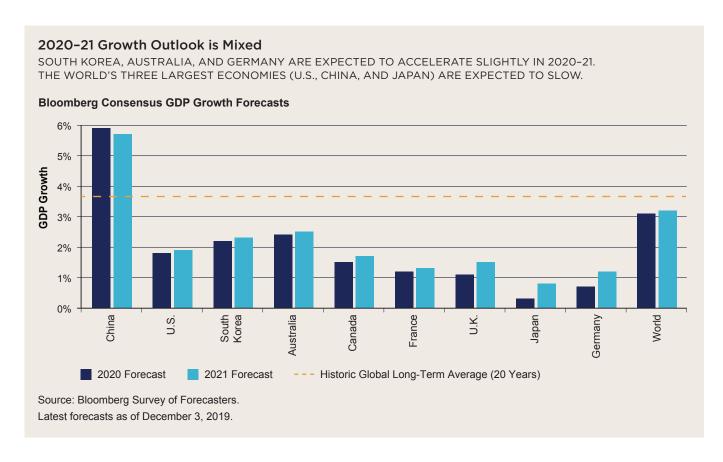
Stock selection for portfolio managers relies on matching what tenants in a high-growth micro-district are looking for with what an asset has to offer. The pricing of this match involves the forecasting of income streams, repositioning costs, future demand relative to competing supply, and how the capital markets will price the match in five or ten years. Stock selection, by definition, is a highly micro exercise, and should be consistent with the market dynamics of both the local neighborhood and the macro environment.

Global Trade Growth Stalls

The global growth outlook for 2020 is mixed. The world's three largest economies—the United States, China, and Japan—are all expected to slow. The OECD and the IMF both expect global growth to pick up slightly in 2020, although the Bloomberg consensus (see 2020–21 Growth Outlook is Mixed on page 9) does not. Our analysis of the potential macroeconomic headwinds and tailwinds suggests that there is more downside than upside to all these forecasts. Our take is that the biggest macroeconomic issue is how national economies, capital markets, and property markets will react to all the geopolitical noise in the system.

Over the past several years, economic growth has been surprisingly unperturbed by highly disturbing geopolitical headlines. Who would have predicted that the U.K. economy would grow twice as fast as Germany's in 2019, the year that Brexit was scheduled to launch? Or that China's reported growth would slow by just a half of one percentage point (from 6.25% to 5.75%) in the year when

¹⁵ UI: user interface, UX: user experience.



trade tariffs on Chinese exports to the U.S. went into effect? Such a small decrease in China's growth rate is consistent with slowing demographics and the difficulty of maintaining an emerging market growth rate when the size of the Chinese economy has grown from \$2 trillion in 1990 to \$14 trillion in 2018. Even with the tariffs, China's GDP grew by the size of the entire economy of the Netherlands in 2019.

The gradual slowing of global growth is driven by three factors: (1) trade/treaty disputes, (2) a slowdown in global trade, and (3) ageing populations. Trade and treaty disputes remain unresolved and are creating uncertainty for business investment. In addition, slowing global trade is already demonstrable (see International Trade Growth Has Stalled on page 8). This decreases the rate at which the economies of comparative advantage accrue to trade partners. Finally, population ageing and falling population growth are impacting economies across the globe (see The Elderly Share of World Population Will Increase on page 10). None of these factors are likely to have catastrophic consequences in 2020–22, but they do imply that global growth will be a full percentage point lower in the 2020s (hovering around 3%) versus 4% in the previous decade (with the GFC taken into account).

Polarized electorates and strengthening nationalism create conditions that lead to trade barriers and the erosion of global trade activities. Divisive politics are also consistent with the rise of both far-right (anti-immigrant) and far-left (socialist) agendas, which could weigh more heavily on the growth outlook for some capitalist economies in 2020. The unequal distribution of wealth and

income is a serious problem in many countries, but many businesses fear that the "medicine" may be more toxic than the "disease." This debate will occur in more countries in the decade ahead, as massive wealth creation for a tiny minority transpires alongside stagnant earnings for a much larger majority.

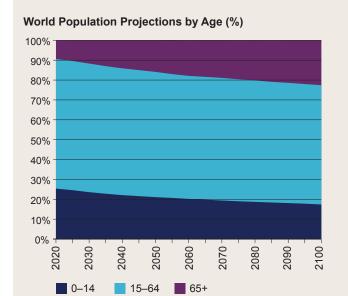
In Chapter 2, we discuss the economic prospects of the major economies where we are most active. The headwinds we identify above are not necessarily crippling. The past ten years taught us that real estate does not need high GDP growth at the national level to achieve strong financial performance. Real estate does, however, need pockets of economic expansion to sustain rent growth, leasing, and repositioning strategies. It also thrives

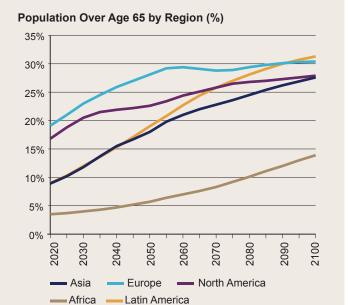


Rienzi at Turtle Creek, Dallas, TX, USA

The Elderly Share of World Population Will Increase

FASTEST-GROWING RETIREE POPULATION IS CONCENTRATED IN ASIA AND THE DEVELOPING WORLD





In projecting future levels of fertility and mortality, probabilistic methods were used to reflect the uncertainty of the projections based on the historical variability of changes in each variable.

Source: United Nations World Population Prospects 2019, Median Projection.

on falling interest rates, inexpensive debt, and loose monetary policy. Of all the tailwinds, the most powerful boost to real estate performance has been from the capital markets, which in real estate terms, has bestowed the twin gifts of capitalization rate compression and low-cost debt.

High Asset Valuations/ Low Interest Rates

Perhaps the biggest surprise over this ten-year, post-GFC cycle has been persistently low interest rates. In particular, long-dated sovereign bonds have behaved very differently than in past expansion cycles. Extreme monetary measures—setting overnight repo rates close to zero, the introduction of quantitative easing, and the deployment of detailed forward guidance and inflation targets—were expected by many to lead to a return of pre-GFC levels of short- and long-term interest rates. The consensus view was that eventually we would return to a "normalized" interest rate environment. Much to the surprise of economists and bond gurus, this never materialized.

The ripple effects in the real estate markets are still being felt. Upward price pressure on core real estate is palpable whenever interest rates hit new lows in any country. As a result, quarterly reports to investors regularly include a comment like this: "Real estate yield spreads look healthy from the perspective of ultra-low sovereign and corporate bond yields, even though in absolute terms real estate cap rates are at, or close to, record low levels." This statement suggests that a positive income stream is welcomed by many investors when \$15 trillion worth of bonds carry a

negative interest rate and another \$10 trillion pay investors less than 1% (see Bond Yields Have Fallen Together Over the Past Year).

In this environment, investors should keep in mind two related issues: 1) real estate investment managers cannot control these interest rates, and 2) the value created by falling interest rates has little to do with real estate investment skills. The implication for investment strategy is that these powerful macro forces do not impact all parts of a real estate portfolio equally. Long duration leases, like long duration bonds, can be more sensitive to interest rate movements, especially if they do not have rent escalations. Placing long duration debt at a fixed rate on a property hedges some of this interest rate sensitivity, but not all of it. Our advice to investors is to review the weighted average lease terms and debt duration in all portfolios and make sure that they are consistent with a balanced view of both lower-for-longer and other, more volatile, interest rate scenarios that might be present in each country.

Capital Market Volatility

The issue with high asset valuations is that it is hard to see how future capital markets can look anything near as favorable as in the past. True, the zero lower bound for interest rates has been breached, but further drops in interest rates and runaway deflation seem an unlikely scenario in 2020-22, especially when central banks can flood the banking system with credit. A spike in interest rates or inflation has been the fear of bond vigilantes for nearly eight years. However, high inflation never

Capital Market Dashboards Show a Mix of Positive and Caution Indicators

		09/15	12/15	03/16	06/16	09/16	12/16	03/17	06/17	09/17	12/17	03/18	06/18	09/18	12/18	03/19	06/19	09/19
U.K.	Supply/ Demand																	
	Debt/Equity																	
	Pricing																	
France	Supply/Demand																	
	Debt/Equity																	
	Pricing																	
Germany	Supply/Demand																	
	Debt/Equity																	
	Pricing																	
U.S.	Supply/Demand																	
	Debt/Equity																	
	Pricing																	
Japan	Supply/Demand																	
	Debt/Equity																	
	Pricing																	
Australia	Supply/Demand																	
	Debt/Equity																	
	Pricing																	

- Positive (headed in the right direction; minimal concern)
- Caution (merits added scrutiny)
- Danger (clear signal of potential disruption or downturn)

Each country has nine indicators; three in each macro indicator group. The metrics are specific to each country, although common methodologies are employed.

Source: LaSalle Investment Management.

happened, and inflation targets were not achieved by most central banks, so real estate has remained a safe haven for investors.

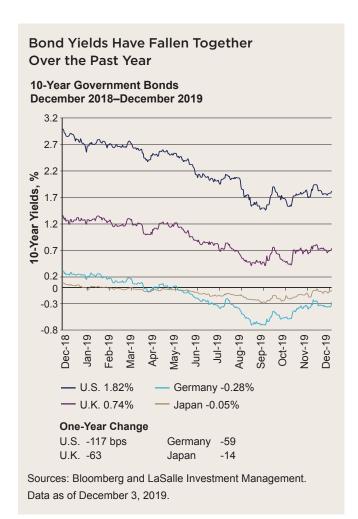
Looking forward, even when the interest rate playbook is thrown out, it is impossible to imagine real estate running the same capitalization rate compression route in 2020–22. With pricing close to peak levels across all asset classes, the end of both strong fundamentals and falling cap rates logically implies that the outlook for returns over the next five years will be much lower than the previous five years. These conditions also suggest that investors should expect the capital markets to endure waves of volatility. In the current environment, investors should follow a System 2 (deliberate and slow) approach to real estate investment, as it has an important stabilizing influence on financial performance during periods of choppiness. An investor who adopts a non-core style of investing thrives on volatility and takes advantage of periods when knee-jerk System 1 thinking (fast and instinctive) prevails, credit dries up, risk aversion is extreme, and equity is scarce. That environment is not yet here, but the odds are shortening every year and eventually it could show up.16

Technology Drivers

Technological innovation affects all phases of the real estate investment cycle—from acquisition, to asset management and operations, through selling and harvesting the gains. In many cases, an active management approach will rely on technology to attain outperformance. For instance, tenant satisfaction-and renewal conversion—in residential buildings can be improved through online communication channels that provide property managers with more points of contact with their tenants. Package delivery, booking clubhouse rooms for private parties, and other concierge-like services are all made more efficient through web-enabled communications. This well-known example, however, is not as advanced in other property types, but it certainly could be. Tenants in offices, shopping centers, and logistics buildings are finding that more frequent communication with their property manager helps them build networks that save them money and generate hiring and/or sales leads.

We believe technology will continue to be both a potential headwind and a tailwind, not just in the next three years, but in the decade ahead. Already, the range of outcomes in recent years has followed a recurring pattern of incumbent disruption, emerging winners, and efficiency

¹⁶ A recent note on November 5, 2019 from Ray Dalio to his Bridgewater clients warned: "The world has gone mad and the system is broken." The reference was to the growth of central bank balance sheets and government deficits.



gains. In the real estate industry, the people on the front lines for proptech adoption and disruption are asset managers and on-site property managers. They cope with new expectations from tenants as well as new sources of intelligence about what they want (see Proptech and Data Science for Real Estate Investment on page 47).

Asia Pacific

Inter- and intra-regional trade—both merchandise and services—are important drivers for growth in Asia Pacific. Multilateral and bilateral trade agreements between Asia Pacific economies have supported the growth of intra-regional trade flows, particularly after the Global Financial Crisis. However, all Asia Pacific economies must change their supply chains—a result of the various trade disputes around the world. The ability of the largest Asia Pacific economies to adapt to new terms of trade will be a major factor in their prospects for future growth.

As the region contends with the trade war/tensions and other geopolitical headwinds, there are many reasons for optimism. India and China are the two fastest-growing large economies in the world, and both are creating more demand for trade and travel within the region than ever before. This growing self-reliance of Asia Pacific countries is not without its own set of trade tensions, of course, but it does help insulate the region from an over-reliance on

trade with the U.S. or the EU. Moreover, natural resources and agricultural products from Africa and Latin America can substitute for traditional trading partners, if the U.S., for example, turns out to be an unreliable trading partner.

Our research team believes that over the next three years, decelerating economic conditions are inevitable in Asia Pacific, but it will remain the fastest growing region. Property markets will not be immune, but as the analysis in Chapter 2 shows, each property type and major metro market in Asia Pacific will experience this slowdown differently. Hong Kong is clearly the most exposed to the slowdown, for political reasons, but other countries like Australia and South Korea are also closely tied to China. Japan is less exposed to a slowdown in China than other Asia Pacific countries primarily due to its safe haven status, the ongoing shortage of labor that supports steady household income, and the recently announced stimulus package offsetting the impact of the October 2019 consumption tax hike.

Europe

The macro outlook for Continental Europe is filled with contradictions, uncertainty, and the "wind of change." 17 When the Berlin Wall came down thirty years ago and the formation of the European Union soon followed in 1993, there was great optimism in Continental Europe, accompanied by high levels of uncertainty. Today, optimism and uncertainty have declined to levels last seen in the 1990s. President Christine Lagarde of the European Central Bank (ECB) says that the bank stands ready to continue Mario Draghi's "whatever it takes" policies. The national governments of Europe do not always see eye to eye on the details of autonomy versus central control, but they mostly agree that a common currency and a coherent set of trade and labor policies within the EU is well worth maintaining. Despite anti-Brussels critics on both sides of the Channel, the great experiment of the EU has been a force for more economic and social benefits than costs over the last 25 years. As the EU continues to evolve, its bureaucracy must constantly adjust to new political leadership and take a pragmatic view on sensitive issues like migration, defense treaties, and fiscal support for weaker economies.

Despite all the political tensions and headlines in France, Germany, Spain, and Italy (to name just the largest sharply divided countries), the general economic growth prospects for the Continent remain stable, though not robust. Structural issues include ageing populations and weaker exports, due to falling trade with both the U.S. and China. The hot spots of Continental Europe have shown great resiliency over time, as LaSalle's 20th Anniversary of the E-REGI report shows. Paris, Munich, Stockholm, Berlin,

¹⁷ The iconic song by the Scorpions released in January 1991 and composed during the band's visit to the USSR, just before the collapse of the Soviet Union.

Madrid, Copenhagen, and Amsterdam are among the cities that continually attract educated workers from all over Europe, and the property markets in these cities remain very healthy.

Over the next few years, the U.K. will be the least predictable country in Europe; it is also one of the most sharply divided, both economically and politically. London remains the top-ranked city in Europe to attract creative tech and financial talent. The post-referendum resilience of London has been a positive surprise, and our base case scenario suggests that this will continue. Yet, the north of England lags behind in making the transition from regions based on manufacturing and commodities to conurbations with economies based on high tech and services. The U.K. economy could get dragged down, as the restructuring of trade relations and immigration policies with the EU will likely take several years to be put in place. Concurrently, many second-tier British property markets could suffer from weak tenant demand, even as London continues to thrive. British shopping centers are already suffering more financial stress than those of other countries, while other property sectors continue to show much healthier fundamentals. Despite all the uncertainty, the national economic outlook for the U.K. shows remarkable resilience and could grow faster than the euro area in 2020-21, just as it did in 2019.

North America

Our base case for the macro-economic outlook in North America suggests that a record-long period of slow, steady growth can be sustained in the U.S. and Canada in 2020. Both of these economies are in reasonably strong shape and should be able to continue to grow due to a combination of corporate momentum, strong employment, positive consumer sentiment, and fiscal stimulus. Should the need arise, monetary policies can also inject liquidity into their banking systems to stimulate demand. The risks to a three-year growth forecast for the U.S. include the unforeseen consequences of protracted trade wars, a rapid loss of confidence in capital markets, and/or a geopolitical conflict. Canada is more vulnerable to volatility in commodity markets and natural resources. Both countries are struggling to deal with stagnant income growth in the middle class, and sharply divided electorates. Both are fairly open economies with labor, capital, and real estate markets able to adapt to economic and social change.

The big unanswered questions for the U.S. and Canada lie toward the end of the 2020s and into the 2030s, as entitlement payments rise and both countries come to terms with their status as net debtor countries. The U.S. has greater imbalances in both the size of its federal deficit relative to GDP and in its balance of trade. Yet it also has the more fortunate position of being considered a safe haven for investors and a reserve currency for many other



Wronia 31, Warsaw, Poland

countries who hold U.S. debt. Canada has healthier immigration numbers than the U.S., which insulates its economy from labor shortages. In contrast to the U.S., Canada uses a point system to encourage highly trained people to apply for work visas and to boost output while also increasing innovation.

Climate Change: Implications for **Investment Strategy**

"We declare, with more than 11,000 scientist signatories from around the world, clearly and unequivocally that planet Earth is facing a climate emergency."

 World Scientists' Warning of a Climate Emergency, Bioscience November 5, 2019

On the 40th anniversary of the First World Climate Conference, the Alliance of World Scientists¹ issued this declaration as a reminder of their global consensus on climate change. With building construction and operations accounting for approximately 40% of greenhouse gas emissions² globally, LaSalle recognizes that the real estate investment management industry has a critical role to play in reducing or reversing global warming and CO² emissions. We also recognize that climate change will play a larger role in the performance of real estate portfolios in the years to come.

In 2017, after many years of study and experience implementing successful sustainability initiatives, we added environmental factors ("E-factors") to our secular investment trends of demographics, technology, and urbanization (DTU+E). Our view is that the pricing of E-factors and the return on investment (ROI) for improving the environmental performance of an asset will increase over time, taking local market conditions into account. We also introduced economic and financial frameworks for analyzing the risk-return characteristics of E-factors. These analytical tools ensure that sustainability features are appropriately priced in a disciplined way to improve both financial and environmental performance.

Our DTU+E investment strategy for 2020 includes broader environmental, social, and governance (ESG) concepts like resilience (adaptation strategies for climate change in contrast to mitigation strategies for

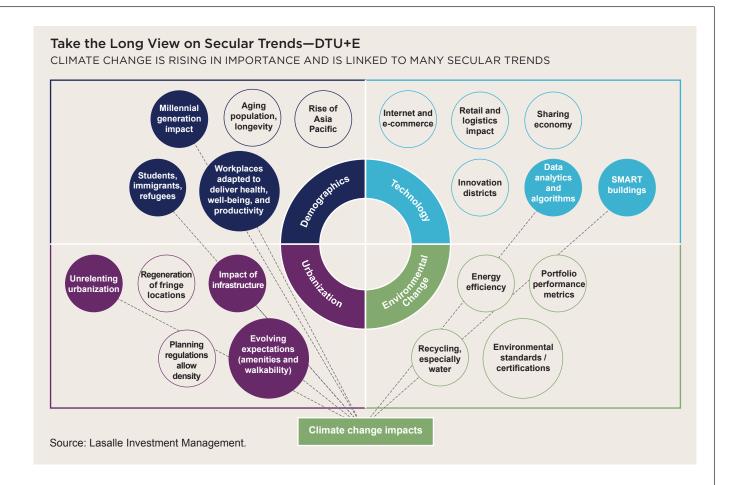
- The Alliance of World Scientists (AWS) is a new international assembly of scientists, which is independent of both governmental and non-governmental organizations and corporations. It asserts that in order to prevent widespread misery caused by catastrophic damage to the biosphere, humanity must practice more environmentally sustainable alternatives to business-as-usual. See: scientistswarning.org.
- 2 Buildings play a dominant role in the clean energy transition. Building construction and operations accounted for 36% of global final energy use and nearly 40% of energy-related carbon dioxide (CO2) emissions in 2017. See: unenvironment.org/resources/report/global-statusreport-2018.
- The release of the Taskforce on Climate-Related Financial Disclosures (TCFD) recommendations in June 2017 and the more recent launch of the Net-Zero Asset Owner Alliance at the United Nations Climate Change Summit in September 2019 show how international organizations are acting, sometimes without the support of national governments.

greenhouse gas emissions), social sustainability (economic and social justice issues), and health and welfare (the well-being and safety of individuals who build, occupy, and travel to buildings). Furthermore, the interplay between the four DTU+E factors and climate change has implications beyond what each trend may have in isolation (see Take the Long View on Secular Trends—DTU+E on page 15). The research to support the thesis that these DTU+E factors matter for investment performance and specifically that climate risks deserve more of our attention is well underway at LaSalle. Our sustainability, risk management, and research teams are working together to identify how these DTU+E factors get priced in different markets, both by tenants and by investors. As this analysis progresses, it will help form the foundation for investment strategies that anticipate future interactions between market-driven and regulatory-driven change.

In the past five years, investment professionals have become more aware of the linkages between the climate change movement (political and regulatory factors), climate risks (measurable increases in global warming and weather volatility), and metrics that allow correlation between financial performance and sustainability.3 Most of the analysis of climate change falls into two risk categories: physical risks and transition risks. There are two types of physical risks: acute and chronic. Acute physical risks refer to those that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods. These risks have financial implications for organizations, such as direct damage to assets and indirect impacts from supply chain disruption. Chronic physical risks refer to longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea level rise or chronic heat waves.

Transition risks involve broader societal, economic, and political implications. Transitioning to a lower carbon emission economy will likely entail extensive policy, legal, technology, and market changes to address requirements related to climate change. Depending on the speed of these changes, transition risks may impose immediate or distant future financial liability and reputational risk to investment managers. Efforts to mitigate and adapt to climate change can produce opportunities for organizations to improve resource efficiency, reap cost savings, adopt low-emission energy sources, and develop new products and services for tenants and investors.

LaSalle's approach acknowledges that no sustainability initiative can quickly reverse ever-higher levels of C02 and other greenhouse gases in the atmosphere. As fiduciaries to our clients, we have an obligation to identify



and mitigate the physical and transition risks to our assets and portfolios. As we assess current and future climate change risks, we find highly variable impacts across geographies, property types, and investment styles. For example, climate-related risks will differ for a core long-term hold office asset in San Francisco, a value-add short-term office asset in Shanghai or a core-plus office asset in Amsterdam. The changing insurance environment is also a major factor in mitigation strategies; the economics of disaster coverage are already changing and will continue to change drastically in the years ahead.

A broader approach also acknowledges that human factors—how people interact with buildings—also deserves attention. Real estate investors have a role to play in how buildings contribute to a healthy and just society, as well as in better stewardship of natural resources. The concept of "resilience" suggests that property investors need to anticipate that severe weather is inevitable despite any interventions.

We are continuing to refine our approach to incorporating climate change in our investment process by conducting and reviewing rigorous research, implementing business practices, and participating in industry initiatives. For example, we have insurance coverage focused primarily on the physical risks for our assets. Considerable effort is

spent ensuring our insurance coverage is well matched with our asset portfolio and reflects the best available insurance market terms and conditions. Regional approaches have been developed for coverage of natural catastrophes. For example, every U.S. acquisition receives a "Cat Score" based on its location and risk attributes applicable to four catastrophe categories: earthquake, flood, wind, and acts of terrorism. We are working with specialists who project future risks based on the rate of rising sea levels and climate warming. Using today's insurance costs to estimate future costs presents a "temporal mismatch" challenge. The industry cannot rely on one-year policies (essentially an insurance "spot" market) when calibrating the decades-long risk profile that climate change presents.

Analyzing, identifying, and valuing the risks and opportunities climate change presents requires significant time, patience, and investment. The benefits can be immediate (e.g., cost saving from efficient energy usage) or far-reaching (anticipating future transition costs). In our view, investment strategies need to take climate risks into account, just as our asset and portfolio operations already do for sustainability initiatives.

⁴ The "Cat Score" is a proprietary numeric score developed by LaSalle and its risk management advisor.